UCTC POLICY BRIEF 2009-01

ARE TODS OVER-PARKED?

Robert Cervero, Arlie Adkins, and Cathleen Sullivan, University of California, Berkeley

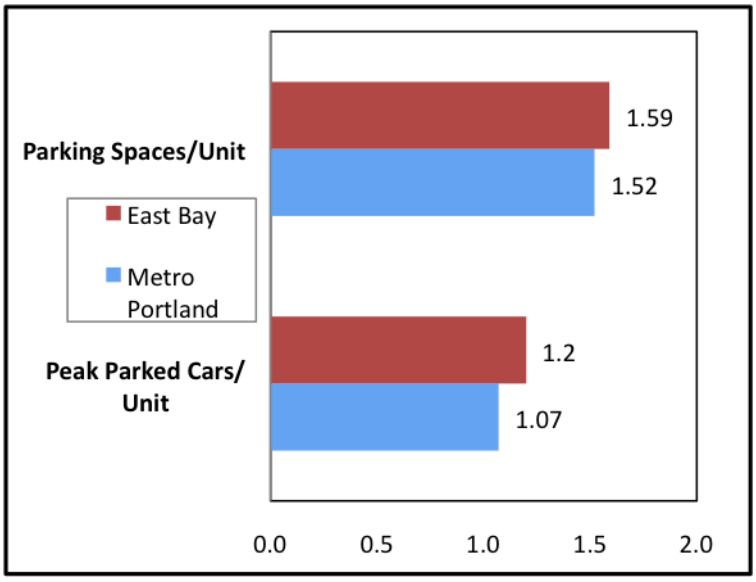
ISSUE

Many apartment projects near urban rail stations, critics charge, are "over-parked" – more parking is provided than needed. This can drive up the cost of housing, consume valuable land near transit, and impose environmental costs such as water pollution from enlarged impervious surfaces.

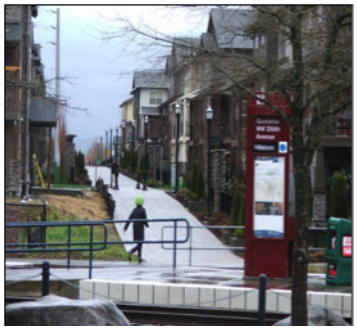
Part of the blame for oversupply of parking in TODs (transit-oriented developments) could be the reliance on parking generation figures from the Institute of Transportation Engineers (ITE). ITE standards assume that car ownership levels and parking demands are no different in traditional suburban settings than in neighborhoods that are served by rail transit. Yet some studies suggest that those drawn to living near urban rail stops do so for lifestyle reasons, prompting many not only to ride transit more often but also to get rid of a car.

RESEARCH FINDINGS

To study this issue, we surveyed 31 multi-family housing projects near suburban rail stations in the East Bay of San Francisco-Oakland and Metro Portland, Oregon. As the figure shows, TOD parking supply exceeded peak demand (midnight to 6AM) by 25% in the East Bay and 30% in Metro Portland. Peak demand, however, was not too different from ITE's standard of 1.2 spaces/unit. Yet vehicle trip generation rates for some projects were well below ITE standards, suggesting many surveyed residents still owned cars but used them less because of nearby rail services.



Our research also showed that size and distance matter. In general, peak parking levels were highest for large-scale apartment projects with generous amounts of parking per unit and that were farthest from the nearest station. For every 1000 feet walking distance that a project lies from a station, we estimated, peak parking increased by 0.7 cars per dwelling unit. Case study work also showed that apartments served by retail shops, that enjoyed direct access to station platforms, and whose shortest walking path was not too circuitous tended to have lower peak parking levels.



Left: Quatama apartments enjoy direct connection to Portland's MAX station; Right: An apartment with high parking demand also suffers from a circuitous shortest path (red line) relative to straight-line distance from the project's center to the Fremont BART station. (black line).

NATIONAL SURVEY

We also surveyed professional planners from 80 U.S. municipalities with rail stations to see if their communities adjusted parking ordinances to account for transit's proximity. 35% of rail-served cities allowed lower off-street parking rates for parcels near transit, ranging from 10% to 60% fewer spaces. Also, 37% of respondents felt that their city's minimum off-street parking requirements were too high for housing near rail stops. However, 85% felt that local elected officials would strongly oppose efforts to eliminate minimum parking requirements even if a project is near a rail station.

RECOMMENDATIONS

Just as land-use environments vary throughout suburban America, so should parking policies. Parking ordinances should be more flexible for projects situated near rail stops. Based on our research, for example, developers of relatively dense apartments with adjoining retail shops and short, direct walking connections to rail stations should have the option of supplying fewer parking spaces than the norm. Flexibility might also take the form of unbundling the cost of parking from the cost of renting housing or providing residents with the option of choosing transit eco-passes rather than paying for an on-site space. And in light of the fact that TOD residents were found to commute by transit proportionately more than they shed cars or reduced parking, car-sharing should be provided in as many rail-served neighborhoods as possible. Putting shared-cars in and around TODs could relieve many households from owning a second car or a vehicle altogether, which would result in not only considerably lower trip generation rates, but considerably less parking demand as well.

This paper series is produced by the University of California Transportation Center, located on the UC Berkeley campus: 2614 Dwight Way, Berkeley, CA, 94720. A full report can be found online at http://www.uctc.net/papers/882.pdf. UCTC Research Paper 882.